

REMARKS

Claims 1-6, 13-19 and 29-42 are pending.

***Related Cases***

The present application is related to U.S. Pat. App. Ser. No. 10/667,685, entitled “Modified System and Method for Intraoperative Tension Assessment During Joint Arthroplasty.” That application was finally rejected on 9/2/2008. A Notice of Appeal and a Pre-Brief Request for Review have been filed. A copy of the final rejection will be made available to the Examiner if requested.

***Claim Rejections – 35 USC §103***

Applicants respectfully traverse the rejection of claims 1-6, 13-19 and 29-42 under 35 USC 103(a) as being unpatentable over Hershberger et al. (5,470,354) in view of Colleran (5,609,643).

Hershberger et al. is not seen to disclose *adhering* a sensor array to either a protective cover or to a body of an implant trial. To the contrary, Hershberger et al. teaches clamping or otherwise mechanically locking the sensor to the tibial component:

- “The tibial component is clamped or locked onto the sensor in order to prevent relative movement during use. An adjustable clamping member can be used to hold the sensor in the slot in the tibial component. The sensor could also be held in place by a retaining clip or pins. The bearing elements also are interlocked with or pinned to the tibial component so they will not be dislodged in the joint or operating room during use. Additional plates can be attached to the tibial component to raise its height if necessary in order to have the device correspond to actual implant dimensions.” (col. 3, lines 44-55)
- “In use with the tibial component 80, the sensor 150 is inserted in the slot 152 formed between the base member 82 and the clamping frame 84 and rests between the base

- member 82 and the rocker members 130, 132 on the bearing elements.” (col. 8, lines 23-27)
- “As indicated, the sensor and appropriate instrumentation monitors and displays the force between the provisional components. The rocker members effectively convert multiple force vectors acting on the provisional component to a single point or line contact on the sensor.” (col. 8, line 65 – col. 9, line 2)
  - “The sensor 150 is retained in the slot in the tibial component 80 with a clamping member 160 (see FIGS. 3, 3A and 7). ... The clamping member is forced against the sensor to hold it in place by the tightening of stainless steel set screw 170. ... When the screw is tightened against the clamping member, the mating sloped surfaces 164, 166 cause the clamping member to be forced or cammed downwardly against the sensor holding it tightly in place.” (col. 9, lines 6–20)
  - “Other means or mechanisms for tightly holding or locking the sensor in place in the tibial component 84 can be used. For example, one or more pins 174 can be positioned in openings 176 which extend through the clamping frame 86 and into the base member 84’ (See FIGS. 13 and 14). Three openings and pins 174 are shown in FIG. 13, but it is understood that any convenient number may be utilized. Also, for this purpose, corresponding openings (not shown) are provided in the force sensor which line up with openings 176 when the sensor is properly mated with the tibial component.” (col. 9, lines 21-31)
  - “Another method for retaining the sensor 150 in the provisional tibial component is shown in FIGS. 18 and 19. In this alternate embodiment, a retaining clip 180 made of plastic, rubber or the like is forced into the slot 152 between the clamping frame 86 and the base 84 and wedged or cammed against the sensor 150. A tab 182 is provided on the

retaining clip to aid in removal of the clip after the tibial component has been used.” (col. 9, lines 32-39)

The portion of the Hershberger et al. disclosure referred to in the Office Action as teaching a polymer layer at an articulating surface, (col. 7, lines 45-57) relates to the material used for the bearing elements 88, 90. These elements 88, 90 are not adhered or locked to the sensor; to the contrary, Hershberger et al. relies upon relative movement between the bearing elements 88, 90 and the sensor.

Colleran et al. is not seen to fill this gap in the Hershberger et al. teachings. Accordingly, independent claims 1, 13, 29, 37 and 40 are patentable over Hershberger et al. in light of Colleran et al. The dependent claims are likewise patentable over these references.

### ***Conclusion***

It is believed that the claims 1-6, 13-19 and 29-42 are in condition for allowance. Applicants respectfully request reconsideration, further examination and that a timely Notice of Allowance be issued in this case.

Respectfully submitted,  
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